Table 2-6. Groundwater Wells Located Downgradient of the DU Impact Area

Township	Range	Section	Reference Number	Well Depth (ft)[a]	Depth to Bedrock (ft)[a]	Formation	Static Water Level (ft)[a]	Well Use	Install Date	Status
5N	9E	10	220845	189	Unknown	Unknown	11	Home	Unknown	Unknown
5N	9E	10	220850	78	Unknown	Limestone	11	Home	1945	Unknown
5N	9E	11	220873	85	20	Limestone	10	Home	1960	Unknown
5N	9E	11	220878	80	10	Grey and Blue Limestone	Unknown	Home	1960	Unknown
5N	9E	15	220868	111	17	Limestone	17	Home	1966	Unknown
5N	9E	23	220843	60	35	Hard Blue Limestone	15	Stock	1960	Unknown
5N	9E	34	220811	78	15	Blue Shale and White Lime	27	Home	1966	Unknown
5N	9E	34	220816	96	15	Blue Stone or Soapstone	14	Home	1964	Unknown
5N	9E	34	220821	285	16	Limestone	Unknown	Home	1963	Unknown

Source: IDNR 2001a.
[a]To convert from feet to meters, multiply by 0.3.

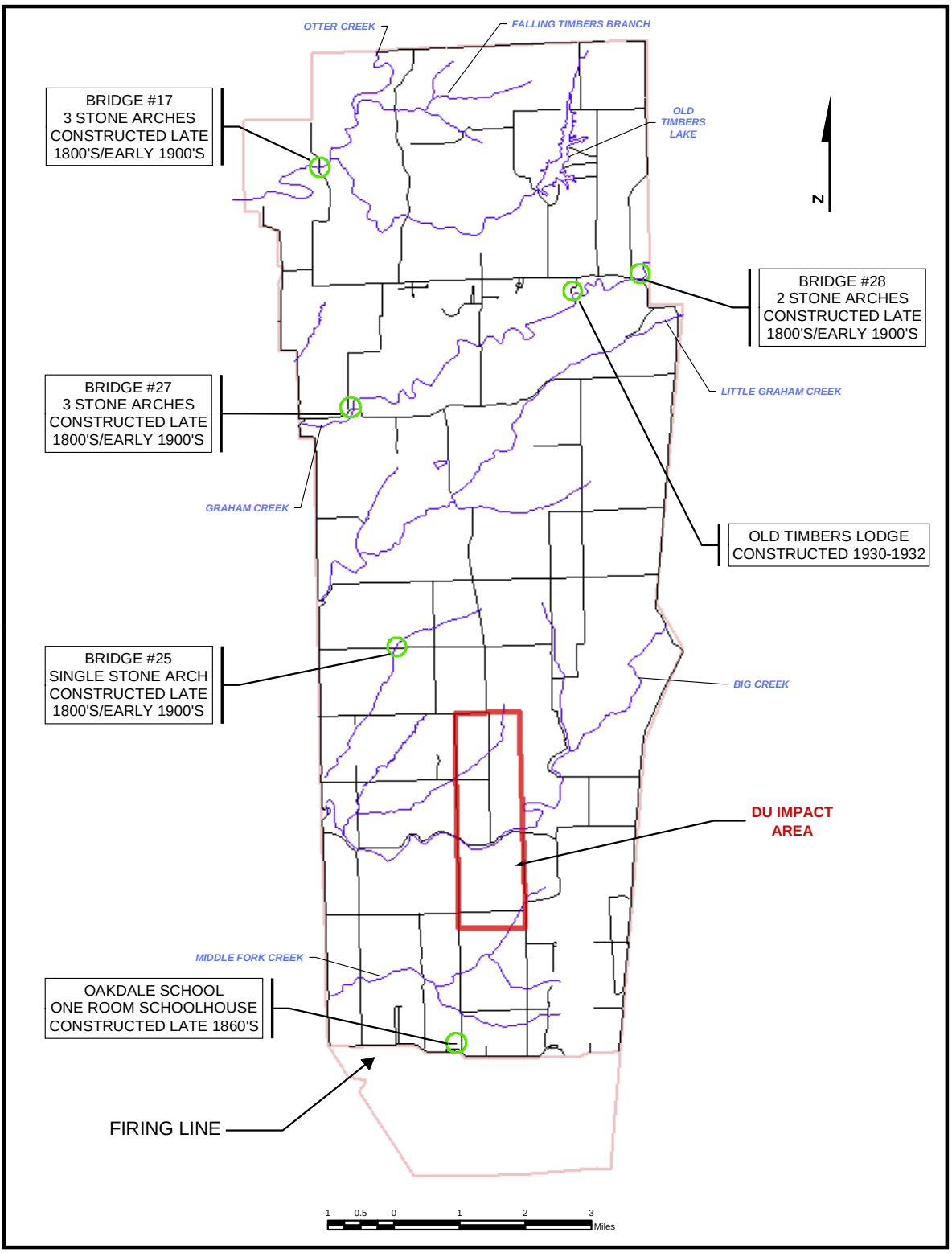

Figure 2-10. Sites Listed on the National Register of Historic Places
Jefferson Proving Ground, Indiana

2.8 BIOLOGICAL RESOURCES

In this section, characteristics of wetlands (Section 2.8.1), plants (Section 2.8.2), and wildlife (Section 2.8.3) at JPG are described. Information is derived from numerous sources, including FWS 1994a,b and 2001a–e; IDNR 1999; SAIC 1997a; Kentucky State Nature Preserves Commission (KSNPC) 2001; and MWH 2002.

2.8.1 Wetlands

The current estimate of wetland acreage on JPG is 6,470 acres (26 km^2). Of these wetlands, there are 353 acres (1.4 km^2) located on the DU Impact Area based on maps published by the FWS. Within the DU Impact Area, the wetlands are located predominately south of Big Creek (see Figure 2-11).

Most of the wetlands on JPG are classified as palustrine forested lands, which are dominated by woody vegetation 20 ft (6 m) high or taller. The wetlands within the DU Impact Area are classified as palustrine scrub-shrub dominated by broadleaf, scrub-shrub, with woody vegetation less than 20 ft (6.1 m) high. Riverine upper perennial wetlands are located along sections of Big Creek (FWS 1994b).

2.8.2 Plants

Upland forests make up 27,400 acres (111 km^2) or 55% of the JPG acreage (see Figure 2-12). The primary evergreen species at JPG is eastern red cedar (*Juniperus virginiana*). Dominant deciduous trees include sweetgum (*Liquidambar styraciflua*), red maple (Acer rubrum), and black gum (Nyssa sylvatica) on poorly drained upland depression sites. Tulip poplar (*Liriodendron tulipifera*) and white ash (*Fraxinus americana*) are the species making up a majority of the young upland forests on well-drained sites. White oak (*Quercus alba*), red oak (*Quercus rubra*), and shagbark hickory (*Carya ovata*) are the dominant species on intermediate and some mature upland forests. American beech (*Fagus grandifolia*) and sugar maple (*Acer saccharum*) dominate the remainder of the mature upland forests (FWS 2001d).

The second most abundant habitat at the JPG is grasslands. This habitat type comprises 8,400 acres (12.14 km^2 or 17%). The dominant grassland species appears to be broom sedge (*Andropogon* sp.) [FWS 2001d].

Other habitat types at JPG include 5,200 acres (21 km^2 or 10%) of palustrine wetland, 3,000 acres (12.14 km^2 or 6%) of woodland, 6,200 acres (25 km^2 or 12%) of early successional, and less than 250 acres (1 km^2) each of open water and bare soil areas. Woodland species composition is comparable to that of upland forest. The palustrine wetland category includes all growth stages of palustrine vegetation, including early successional and forested wetland (FWS 2001d).

A plant inventory of JPG conducted in 1999 identified 46 species of vascular plants designated as endangered, threatened, or rare, or that are on the State of Indiana's watch list. These plants and their statuses are listed in Table 2-7. No federally listed plants were found (IDNR 1999). An inventory of the DU Impact Area was not conducted during the 1999 survey. Therefore, the occurrence of endangered plants within the DU Impact Area is unknown. Other references (IDNR 1993; MWH 2002) include inventories of observed and potential plant species within JPG. These previous inventories also do not indicate probable locations of these species within the facility.